

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION**

Sonos, Inc.,

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Plaintiff,

No. 6:20-cv-881-ADA

v.

Google LLC,

Defendant.

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PLAINTIFF SONOS, INC.'S OPENING CLAIM CONSTRUCTION BRIEF

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PARTIES' PROPOSED CONSTRUCTIONS

Claim Term	Sonos Construction	Google Construction
“ multimedia ” [’206 and ’615 Patents]	“any type of media that comprises audio (including audio alone)”	Plain and ordinary meaning; no construction necessary at this time
“ network interface ” [’206, ’615, ’885 Patents]	“ a physical component of a device that provides an interconnection with a data network ”	Plain and ordinary meaning; no construction necessary at this time
“ playback device ” [’206, ’615, ’033 Patents] / “ zone player ” [’966, ’885 Patents]	“a data network device configured to process and output audio”	Plain and ordinary meaning; no construction necessary at this time
“ zone configuration characterizes one or more zone scenes ” [’206 Patent]	“configuration data that provides an indication of one or more zone scenes”	No separate construction proposed. <i>See “zone” and “zone scene” terms.</i>
“ zone ” [’206 Patent]	No separate construction necessary.	“an area or areas with one or more playback devices”
“ zone scene ” [’206 Patent]		“a group of two or more zones that are grouped according to a common theme by configuring the zones in a particular scene (e.g., morning, afternoon or garden)”
“ zone scene identifying a group configuration associated with two or more of the plurality of independent playback devices ” [’206 Patent]	“a previously-saved grouping of [independent playback devices / zone players] that are to be configured for synchronous playback of media when the zone scene is invoked”	No separate construction proposed. <i>See “zone” and “zone scene” terms.</i>
“[first / second] zone scene comprising a [first / second] predefined grouping of zone players including at least the first zone player and a [second / third] zone player that are to be configured for synchronous playback of media when the [first / second] zone scene is invoked ” [’966, ’885 Patents]		
“ group configuration ” [’206 Patent]	No separate construction necessary.	Indefinite
“ invoked ” / “ invoke ” / “ invocation ” [’206, ’966, ’885]	Plain and ordinary meaning; no construction	“applying a parameter or setting”

Patents]	necessary at this time	
“causing the selectable indication of the at least one of the one or more zone scenes to be displayed” [’206 Patent]	Plain and ordinary meaning; no construction necessary at this time	Indefinite
“local area network” [’615 Patent]	“data network that interconnects devices within a limited area, such as a home or office”	Plain and ordinary meaning; no construction necessary at this time
“cloud” [’615 and ’033 Patents]	Plain and ordinary meaning; no construction necessary at this time	“over a network”
“a media particular playback system” [’615 Patent]	“a media playback system”	Indefinite
“data network” [’966, ’033, ’885 Patents]	“a medium that interconnects devices, enabling them to send digital data packets to and receive digital data packets from each other”	Plain and ordinary meaning; no construction necessary at this time
“remote playback queue” [’033 Patent]	Plain and ordinary meaning; no construction necessary at this time	“remote playback queue provided by a third party application”
“an instruction for the at least one given playback device to take over responsibility for playback of the remote playback queue from the computing device, wherein the instruction configures the at least one given playback device to” [’033 Patent]	Plain and ordinary meaning; no construction necessary at this time	“an instruction for the at least one give playback device...”; Instruction means one instruction.
“wherein the instruction comprises an instruction” [’033 Patent]	Plain and ordinary meaning; no construction necessary at this time	Indefinite

Consistent with the principles set forth in *Phillips v. AWH Corp.*, Sonos proposes constructions that are firmly based on the intrinsic evidence. 415 F.3d 1303 (Fed. Cir. 2005). In contrast, Google proposes whatever definitions best serve its defenses, repeatedly violating the principles in *Phillips*. In many instances, Google imports limitations into the claims that are unsupported by the intrinsic evidence—often times for terms that are already clear and need no construction. In other instances, Google ignores the intrinsic evidence altogether and defines terms in a vacuum. Sonos respectfully requests that the Court reject Google’s litigation-inspired constructions and adopt Sonos’s constructions for those terms that actually need construction.

I. Factual Background

Sonos began in 2002 as an American start-up consumer electronics company with a goal of reinventing home audio for the digital age. To achieve this goal, Sonos pioneered what is known as wireless multi-room audio, bringing its first commercial products to market in 2005. Sonos’s wireless multi-room audio system was based on new audio players called “zone players” (or “playback devices”), which are “smart” devices that connect to a local “data network” and can be placed in any room throughout a user’s home. Once connected to the local data network, each zone player has the ability to independently access any audio source that is available on either the local data network or the Internet. As a result, each zone player can play different audio independently from other zone players, or multiple zone players can be grouped together to play the same audio in synchrony. Each zone player can be controlled from anywhere in the user’s home via a control device (or “controller”) that is also connected to the local data network.

The following figure illustrates a simplified diagram of an exemplary Sonos audio system comprising zone players 102-106 and controllers 140-142 coupled to one another by a local data

network 108, along with a connection to the Internet. *See* Patent Nos. 9,344,206, 10,469,966, and 10,848,885 at FIG. 1.

The Asserted Patents¹ here are directed to various novel aspects of Sonos's networked audio system. For

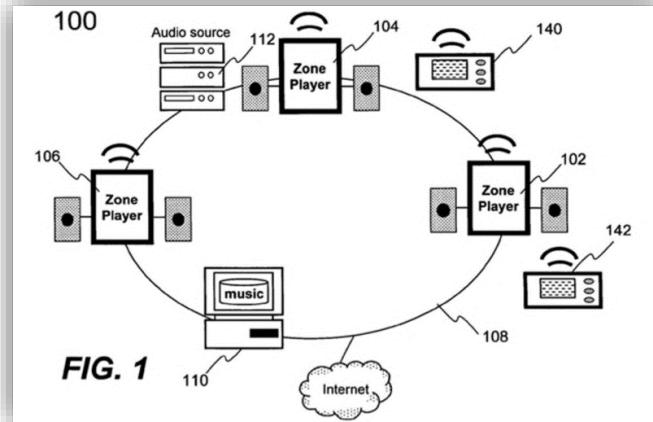


FIG. 1

The diagram illustrates a networked audio system (100) consisting of three zone players. One zone player (106) is connected to an audio source (112) and the Internet (110). Another zone player (102) is connected to a television (music) and the Internet (110). A third zone player (104) is connected to a speaker (140) and the Internet (110). All zone players are interconnected via a network (108).

example, Sonos's '206, '966, and '885 Patents (the “Zone Scene Patents”) claim new technology that Sonos invented for grouping zone players to play the same audio in synchrony. With this new technology, instead of having to identify every zone player that is to be included in the group “on the fly” at the time that the user wishes to group the zone players together for synchronous playback, a user is given the ability to create and save a predefined grouping of zone players. This grouping of zone players is stored within the system and can then later be activated at the time that the user wishes to actually group the zone players together for synchronous playback – all of which allows zone players to be grouped in an easier and more intuitive way. This new type of previously-saved grouping of zone players is, as claimed, referred to as a “zone scene.”

Sonos's '615 and '033 Patents (the “Direct Control Patents”) cover key aspects of Sonos's inventive cloud-based approach for seamlessly transferring playback of an Internet stream of media content from, for example, a user's personal computing device, such as a smart phone, to a user's home playback system despite the user's device not necessarily being set up as a dedicated controller for the playback system.

II. “Multimedia” [Proposed by Sonos]

The term “multimedia” appears in claims 1-11 of the '206 Patent and the asserted claims

¹ U.S. Patent Nos. 9,344,206 (“'206 Patent”), 9,967,615 (“'615 Patent”), 10,469,966 (“'966 Patent”), and 10,779,033 (“'033 Patent”) and 10,848,885 (“'885 Patent”). Attached as Exs. 1-5.

of the '615 Patent. In connection with another Sonos patent that is intrinsic evidence to the '615 Patent², this term has already been construed on multiple occasions to mean “*any type of media that comprises audio (including audio alone)*” – which is Sonos’s proposed construction here. For instance, in an action that Sonos filed against D&M Holdings Inc. (“D&M”) in the District Court of Delaware, the Delaware court agreed with Sonos that the term “multimedia” in the context of Sonos’s patents was “intended to include media comprising only audio.” *See* Ex. 6 at 14-15. Likewise, in a recent action that Sonos filed against Google in the International Trade Commission (“ITC”), Google itself agreed that this was the proper construction of “multimedia,” and the ITC adopted this construction. Ex. 7 at 15.

Despite previously agreeing to this construction in the parties’ ITC action, Google is now taking the contrary position that term “multimedia” should not be construed and that a plain and ordinary meaning should govern.

Regardless, the intrinsic evidence here definitively establishes that the Asserted Patents use the term “multimedia” to refer to *any* type of media that comprises audio – including *audio alone*, which is the lead example of “multimedia” described. *See, e.g.*, ’206 Patent at 4:32-36 (“There are a number of ***multimedia*** players of which three examples 102, 104 and 106 are shown as ***audio*** devices.”), 2:28-37, 3:16-21, 4:58-5:3, 5:60-6:5, FIG. 1; ’615 Patent at 1:66-2:14 (“[N]etworks can be used to connect one or more ***multimedia*** playback devices for a home or other location playback network (e.g., a home ***music*** system). . . . ***Music and/or other multimedia content*** can be shared . . .”), 3:28-37, 6:8-7:19, 11:6-14, 12:8-63, 15:51-57, FIGs 2A-C.

III. “Network Interface” [Proposed by Sonos]

Due to the networked nature of its system, many of Sonos’s patents specify that the claimed

² U.S. Patent No. 8,588,949 addressed by the Delaware court is cited on the face of the '615 Patent, and thus, is part of the '615 Patent’s intrinsic prosecution history.

devices include a “network interface,” including the ’206, ’615, and ’885 Patents asserted here.

In connection with other Sonos patents that are intrinsic evidence to the ’206, ’615, and ’885 Patents³, this term has already been construed on multiple occasions to mean “*a physical component of a device that provides an interconnection with a data network*” – which is Sonos’s proposed construction here. For instance, in Sonos’s action against D&M, the Delaware court agreed with Sonos that the term “network interface” in the context of Sonos’s patents should be construed in this way. *See* Ex. 6 at 12-13. Likewise, in Sonos’s ITC action against Google , Google itself agreed that this was the proper construction of “network interface” in the context of Sonos’s patents, and the ITC adopted this construction. Ex. 7 at 15.

Despite previously agreeing to this construction of “network interface” in the parties’ ITC action, Google is now taking the contrary position that “network interface” should not be construed and that the plain and ordinary meaning should govern.

Sonos’s construction is entirely consistent with the intrinsic evidence, which makes clear that a “network interface” is “a physical component of a device that provides an interconnection with a data network.” For instance, the ’206, ’615, and ’885 Patents disclose that the “network interface” facilitates “data flow” between a device (*e.g.*, a “zone player”) and a “data network,” which involves “assembling of an audio source or file into smaller packets that are to be transmitted over the data network,” “reassembl[ing]” of “received packets into the original source or file,” and “handl[ing] the address part of each packet.” ’206 Patent at 5:14-23;⁴ ’615 Patent at 7:37-44.

IV. “Playback Device” / “Zone Player” [Proposed by Sonos]

As explained above, Sonos’s networked audio system is built around intelligent “zone

³ One or more of the patents addressed by the Delaware court is cited on the face of each of the ’206, ’615, and ’885 Patents, and thus, part of their intrinsic prosecution history.

⁴ The Zone Scene Patents have nearly identical specifications. Teachings cited herein from the ’206 specification can also be found in the ’966 and ’885 specifications.

players,” which are also referred to as “playback devices” in Sonos’s patents. These terms appear in all the Asserted Patents here.

In connection with other Sonos patents that are intrinsic evidence to the Asserted Patents⁵, these terms have also already been construed on multiple occasions to mean “*a data network device configured to process and output audio*” – which is Sonos’s proposed construction here. For instance, in Sonos’s action against D&M, the Delaware court agreed with Sonos that the terms “zone player” and “playback device” in the context of Sonos’s patents should be construed in this way. *See* Ex. 6 at 8-12. Likewise, in Sonos’s ITC action against Google, Google itself agreed that this was the proper construction of the terms “zone player” and “playback device” in the context of Sonos’s patents, and the ITC adopted this construction. Ex. 7 at 15.

Despite previously agreeing to this construction in the ITC action, Google is now taking the contrary position that terms “zone player” and “playback device” should not be construed and that the plain and ordinary meaning should govern.

Regardless, the intrinsic evidence of Sonos’s patents makes clear that the terms “zone player” and “playback device”⁶ refer to a ***data network*** device that is configured to ***process and output*** audio. As an initial matter, the “zone players” and “playback devices” of the Asserted Patents are always described in the context of a ***networked*** audio system, which the Asserted Patents distinguish from “conventional multi-zone audio system[s]” where passive speakers were “hard-wired” back to a “centralized” device via dedicated speaker wiring. *See, e.g.*, ’206 Patent at 1:40-61; ’615 Patent at 6:50-60. Moreover, the “zone players” and “playback devices” of the

⁵ One or more of the patents addressed by the Delaware court is cited on the face of each of the Asserted Patents, and thus, part of the Asserted Patents’ intrinsic prosecution history.

⁶ *See, e.g.*, ’615 Patent at 3:28-29, 4:32-33, 8:49-50.

Asserted Patents are repeatedly and consistently⁷ described as audio players that connect to a “***data network***” and as having audio processing intelligence.

For instance, the Asserted Patents uniformly describe the “zone players” as devices that include a “network interface” and connect to a “data network.” *See, e.g.*, ’206 Patent at 4:44-45 (“*All of the zone players* 102, 104 and 106 are coupled directly or indirectly to a ***data network*** 108.”)⁸, 4:49-5:2, 5:23-64, 7:60-65, FIG. 1, FIG. 2A; ’615 Patent⁹ at 5:21-23 (“The *zone players* 102 to 124 are coupled directly or indirectly to a ***data network***, such as the data network 128 shown in FIG. 1.”), 4:13-18, 5:29-46, 7:5-8:23, 10:59-11:11, 11:58-12:3, 16:1-4.

Similarly, the Asserted Patents uniformly describe the “zone player” as having internal components for “processing” and then outputting audio in the form of either (i) an audio signal to connected passive speakers or (ii) sound waves from integrated speakers. *See, e.g.*, ’206 Patent at 5:60-6:5 (disclosing that “zone player 200” includes “audio processing circuit 210” that processes “an audio source [] retrieved via the network interface 202” to produce “analog audio signals” that are then “provided to the audio amplifier 214 for playback on speakers.”), 5:39-50, 7:40-45; ’615 Patent at 8:4-48 (disclosing that “zone player 400” includes “processor 408 . . . configured to process input data” and “audio processing component 412” that processes “audio that is retrieved via the network interface 402” to produce “analog audio signals” that are then “provided to the audio amplifier 416 for play back through speakers 418.”), 3:38-4:25, FIGs. 2A-2C, 4.¹⁰

⁷ *See, e.g.*, *Groove Digital, Inc. v. United Bank*, 825 F. App’x 852, 856 (Fed. Cir. 2020) (“[A] patent’s repeated and consistent description of a claim term may inform its construction.”); *ICU Med., Inc. v. Alaris Med. Sys., Inc.*, 558 F.3d 1368, 1374-75 (Fed. Cir. 2009) (construing a term to include certain features because the specification “repeatedly and uniformly” described the term to include such features).

⁸ All emphasis herein has been added unless otherwise noted.

⁹ The Direct Control Patents share a common specification. Thus, disclosures cited herein from the ’615 specification are also found in the ’033 specification.

¹⁰ Ex. 6 at 15-16; Ex. 8 at 25-27.

V. “Zone” [Proposed by Google]

For the Zone Scene Patents, Google seeks a construction of the word “zone” to mean “an area or areas with one or more playback devices.” As an initial matter, this construction introduces ambiguity at least with respect to the phrase “an area or areas” because it is unclear how an “area” is any more understandable or clear than the term “zone” itself. The Court should decline to adopt Google’s construction for at least this reason as simply substituting words for claim terms is not an appropriate claim construction exercise. *See, e.g., C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 863 (Fed. Cir. 2004) (agreeing that merely rephrasing or paraphrasing the plain language of a claim by substituting synonyms does not represent genuine claim construction); *Constructive Designs, LLC v. Pepsi-Cola Co.*, Case No. 12-cv-2765, 2013 WL 12139423, at *21 (C.D. Cal. Mar. 13, 2013) (“Claim construction does not require re-stating every word in a claim.”).

Sonos submits that no construction is necessary for this isolated word. “Zone” does not appear anywhere by itself in the claims. Rather, “zone” appears throughout the claims of the Zone Scene Patents in phrases like “zone configuration,” “zone scene,” and “zone player.” As each of these phrases is being construed in this case, there is no reason to separately construe “zone” in isolation. Doing so will only cause confusion, as a lay juror will not understand whether (or how) they should plug in the naked definition of “zone” to these other terms.¹¹

Google’s approach creates an even deeper morass because Google asks for a construction of “zone” only with respect to the Zone Scene Patents, and not with respect to the Direct Control

¹¹ For instance, Google proposes a construction of “zone scene” that uses the word “zone” in the construction. Substituting Google’s construction of “zone” into its construction of “zone scene” results in a syntax nightmare as “zone scene” would then be construed as “a group of two or more area or areas with one or more playback devices that are grouped according to a common theme by configuring the area or areas with one or more playback devices in a particular scene (e.g., morning, afternoon, or garden).” This results in still further confusion because it is not clear what is intended to be “grouped according to a common theme” – the “area or areas” or the “one or more playback devices.”

Patents. For instance, one of the Direct Control Patents (the '615 Patent) recites “zone group,” which is not being construed. A lay juror will not understand whether (or how) they should apply the construction of the word “zone” from the Zone Scene Patents to the word “zone” in the Direct Control Patents. In view of this potential confusion, and the fact that “zone” is not used as an isolated term, no construction of “zone” in the abstract is necessary or appropriate.

VI. “Zone Configuration Characterizes One or More Zone Scenes” [Proposed by Google]

As mentioned above, the Zone Scene Patents describe new technology that Sonos invented for grouping zone players that enables a user to first create and save a predefined grouping of zone players, which in the context of the asserted claims is referred to as a “zone scene,” and then later activate (or “invoke”) that “zone scene” at the time that the user wishes to actually cause the zone players in the “zone scene” to become configured for synchronous media playback. *E.g.*, ‘206 Pat. at 2:30-34.

The Zone Scene Patents disclose that a controller of a multi-zone media system functions to present an interface through which a user may initially create and save a “zone scene” (or just “scene” for short), which causes data that characterizes the saved “zone scene” to be stored at one or more zone players as part of the “zone configuration” data for the system. *Id.* at 6:8-9, 9:42-54, 10:10-20; FIG. 5A-B. Thereafter, a controller can receive the portion of the “zone configuration” data that characterizes the saved “zone scene” from the one or more of the zone players in the system, which enables the saved “zone scene” to be “displayed on the controller” such that it can be activated by a user. *Id.* at 5:51-57, 10:12-13; 10:21-39.

In line with this disclosure, claim 1 of the ‘206 Patent recites “a controller” configured to:

receive, via a network interface, a **zone configuration** from a first independent playback device of a plurality of independent playback devices, wherein the **zone configuration** is configured via the controller and maintained at the first independent playback device, and wherein the **zone configuration characterizes one or more zone scenes**, each zone scene

identifying a group configuration associated with two or more of the plurality of independent playback devices;

'206 Pat. at Cl. 1. Sonos proposes to construe the phrase “zone configuration characterizes one or more zone scenes” within this limitation to mean “*configuration data that provides an indication of one or more zone scenes.*”

This construction is directly in line with the intrinsic evidence. For instance, the claims recite that a “zone configuration” (i) is *received* by the controller via a network interface, (ii) is *configured* via the controller and maintained at the first independent playback device, and (iii) *characterizes* one or more zone scenes. This language establishes that the claimed “zone configuration” refers to configuration *data*, because it is “maintained” at the first independent playback device and received by the controller via its “network interface,” and that it provides an indication of (*i.e.*, “characterizes”) one or more zone scenes.¹²

Turning to the specification, the '206 Patent explains that memory 206 of zone player 200 is “used to save one or more saved *zone configuration files* that may be retrieved for modification at any time,” which demonstrates that the term “zone configuration” refers to configuration data that is stored at a zone player. *Id.* at 5:51-53. The '206 Patent also explains that a “scene may be saved in any one of the members in the scene” and that “a set of data pertaining to the scene includes a plurality of parameters,” which further shows that the claimed “zone configuration characteriz[ing] one or more zone scenes” refers to *configuration data* that provides an indication of one or more zone scenes. *Id.* at 10:9-15.

The prosecution history of U.S. Pat App. No. 14/563,515, which is a related application

¹² See *Eisai Co. v. Glenmark Pharms., Ltd.*, Case No. 13-cv-1279, 2015 WL 1228958, at *8 (D. Del. Mar. 17, 2015) (construing “characterized by” as “identifiable by reference to,” explaining that “the claim limitation is satisfied as long as the crystal form can be “characterized by”—that is, identified by—reference to the [requirements of the claims]”).

that descends from the '206 Patent's grandparent application¹³, further supports Sonos's proposed construction. In that related application, Sonos distinguished the cited "Isely" reference on the basis that "none of Isely's 'networked audio devices' perform the function of '***storing a zone configuration . . . the zone configuration characterizing one or more zone scenes***'" because "rather than storing any information '***identifying a group configuration***," the Isely devices store something else – which again confirms that the claimed "zone configuration" is configuration data that provides an indication of one or more zone scenes. Ex. 9 at 9-10.

Despite this clear guidance regarding the meaning of the claimed "zone configuration," Google contends that the term is indefinite. To date, Google's only explanation is as follows:

[T]he term "zone configuration" is not distinguishable from "zone scene" as described in the specification or under Sonos's theories. As another example, a person of ordinary skill is unable to discern with reasonable certainty what it means for a "zone configuration" to "characterize" a "zone scene" and what information is required to be a characterization.

Ex. 10.¹⁴ Google is wrong on both counts.

First, a POSITA would readily understand how the term "zone configuration" is distinguishable from the term "zone scene" in the context of '206 Patent. Indeed, as explained above, the "zone configuration" refers to the ***configuration data*** that provides an indication of the "zone scene," which is stored by a zone player and received by a controller, whereas "zone scene," as claimed, refers to the "previously-saved grouping of . . . playback devices" that is indicated by

¹³ The grandparent application being U.S. Pat. App. No. 11/583,790 (now U.S. Pat. No. 8,483,853), which appears on the face of the '206 Patent.

¹⁴ Google did not include any explanation of its indefiniteness theories in its initial invalidity contentions that were served on March 5, 2021. Rather, Google waited until the April 16, 2021 deadline for the parties to meet and confer on their proposed constructions to disclose its indefiniteness theories to Sonos, and as demonstrated above, the disclosure that Google provided on that date is still woefully deficient. Given this failure by Google to timely disclose its indefiniteness positions, Google has forfeited its right to argue indefiniteness for any claim terms. In any event, Sonos reserves the right to respond further, including with rebuttal expert testimony, to the extent that Google later expands on its indefiniteness theories.

this configuration data. Or in other words, the “zone configuration” comprises a data representation of the “zone scene.” A POSITA would have no trouble recognizing this distinction.

Second, a POSITA would have no trouble understanding what it means for a “zone configuration” to “characterize” a “zone scene” in the context of the ’206 Patent. As explained above, the “zone configuration” plainly refers to configuration data, and the term “characterize” is a well-understood term to a POSITA that is synonymous with terms such as describe, identify, indicate, and represent. Taking these things together, a POSITA would readily understand that a “zone configuration” “characterizes” a “zone scene” through a set of data that provides information about the “zone scene.” *See also* ’206 Patent at 10:13-19 (explaining that a “zone scene” may be characterized by “a set of data pertaining to the scene [that] includes a plurality of parameters”).

VII. “Zone Scene ... ” [Proposed by Both Parties]

As explained above, the Zone Scene Patents disclose new technology that, as claimed, gives a user the ability to create and save a predefined grouping of zone players, referred to as a “zone scene,” which is stored within the system and can later be activated by a user to actually group the zone players together for synchronous playback. *E.g.*, ’206 Pat. at 2:30-34, 6:8-9, 9:42-54, 10:10-20, FIG. 5A-B. This new “zone scene” technology, as claimed, allows zone players to be grouped in an easier and more intuitive way than an approach that requires a user to identify the zone players that should be included in the group each time “on the fly.” *Id.* at 8:7-60.

To capture this new technology, the asserted claims of the Zone Scene Patents recite various functionality related to creating, storing, retrieving, displaying, and/or activating a “zone scene” comprising a predefined grouping of zone players. The claim language that each of the Zone Scene Patents uses to describe a “zone scene” is as follows:

Patent	“Zone Scene” Language
’206 Patent	“each <i>zone scene</i> identifying a group configuration associated with two

	or more of the plurality of independent playback devices”
'966 Patent	“a first [second] zone scene comprising a first [second] predefined grouping of zone players including at least the first zone player and a second [third] zone player that are to be configured for synchronous playback of media when the first [second] zone scene is invoked”
'885 Patent	“a first [second] zone scene comprising a first [second] predefined grouping of zone players including at least the first zone player and a second [third] zone player that are to be configured for synchronous playback of media when the first [second] zone scene is invoked”

'206 Pat. at Cl. 1; '966 Pat. at Cl. 1; '885 Pat. at Cl. 1.

While the '206 Patent uses different language than the '966 and '885 Patents, when viewed in the context of the Zone Scene Patents, there is no doubt that the claimed “zone scene” in all three patents refers to the same thing: a previously-saved grouping of zone players that are to be configured for synchronous playback of media when the zone scene is invoked. This is confirmed by the claim language itself and the shared disclosure of the Zone Scene Patents.

Starting with the claim language, each Zone Scene Patent makes clear that the claimed “zone scene” is (1) a predefined grouping of zone players that (2) is previously saved at the request of a user and (3) can later be invoked at the request of a user in order to cause the zone players in the predefined grouping to become configured for synchronous playback of media. For instance, the '206 Patent's claim 1 recites that the “zone scene” (1) “identif[ies] a group configuration associated with two or more of the plurality of independent playback devices” (*i.e.*, a predefined grouping of zone players) that (2) is characterized by configuration data that is “configured via the controller” (*i.e.*, is previously saved by a user) and (3) can be “invoked” (or “activated”) at the request of a user. Likewise, claim 1 of the '966 and '885 Patents recite that the claimed “zone scene” (1) comprises a “predefined grouping of zone players” that (2) is created prior to being invoked and (3) can later be “invoked” in order to cause the zone players in the predefined grouping to become configured for synchronous playback of media.

The shared disclosure of the Zone Scene Patents likewise confirms this construction of “zone scene.” For instance, as mentioned, the Zone Scene Patents describe a multi-room audio system in which zone players can be “grouped” together for synchronous playback of media. The Zone Scene Patents are clear that when any two or more zone players are “grouped” they become configured for synchronous playback of media. *E.g.*, ‘206 Pat. at 3:16-20 (“One of the objects, features, and advantages of the present invention is … playing and controlling the audio source ***synchronously if the players are grouped together***”); 7:16-19; 7:40-45. In this way, a “group configuration” and “grouping of zone players” in the context of the Zone Scene Patents refers to a set of zone players that are to be configured for synchronous playback.

The Zone Scene Patents further disclose an approach for grouping zone players for synchronous playback in which a controller can predefine a “group” of zone players but not immediately invoke this group for synchronous playback, instead saving it for later invocation. *Id.* at 8:24-55; 10:4-30. The Zone Scene Patents refer to these previously-saved groupings as “zone scenes” (or just “scenes” for short). *Id.* at 8:24-28 (“Using what is referred to herein as a theme or a zone scene, zones can be configured in a particular scene (e.g., morning, afternoon, or garden), where a predefined zone grouping and setting of attributes for the grouping are automatically effectuated.”). In order to provide the capability to establish a predefined “group” at one time and then invoke the “group” at a later time, the Zone Scene Patents disclose that the “zone scene” can be “saved” in the memory of one or more of the zone players of the system and later recalled by a controller. *Id.* at 6:8-9; 10:10-13; 5:51-57.

Based on the foregoing, Sonos proposes to construe the “zone scene” claim language in each Zone Scene Patent to mean “a previously-saved grouping of zone players that are to be configured for synchronous playback of media when the zone scene is invoked.” This construction

is directly in line with the intrinsic evidence and properly defines the claimed “zone scene” in the context of its surrounding claim language.

By contrast, Google proposes to construe “zone scene” in isolation to mean “a group of two or more zones that are grouped according to a common theme by configuring the zones in a particular scene (e.g., morning, afternoon or garden).” Google’s proposal is hopelessly flawed.

First, Google’s construction ignores the surrounding claim language that defines “zone scene,” unhelpfully parroting the claim language back. For instance, rather than provide a helpful definition that explains what it means to “identify[] a group configuration associated with two . . . playback devices,” Google attempts to define “zone scene” using both “zone” and “scene” and does not account for the claim’s recitation of “two . . . playback devices.” Instead, Google’s construction sidesteps any reference to zone players and instead articulates that a “zone scene” is a “group of . . . zones that are grouped . . . by configuring the zones in a . . . scene.” Using the claim terms themselves in the construction is generally unhelpful to the jury as doing so is akin to simply adding limitations to the plain words of the claim term. *See K-2 Corp. v. Salomon S.A.*, 191 F.3d 1356, 1364 (Fed. Cir. 1999); *Gobeli Rsch. Ltd. v. Apple Computer, Inc.*, 384 F. Supp. 2d 1016, 1024 (E.D. Tex. 2005) (rejecting the defendant’s construction in part because the defendant’s construction “parrots the claim term itself and includes [an] additional limitation”).

Second, Google’s construction results in more confusion than clarity because it introduces undefined terms and phrases. For instance, Google’s construction introduces a new term (“common theme”) in the phrase “grouped according to a common theme” without attempting to explain what it means for zones to be grouped according to a “common theme.” Instead, employing a confusing circular definition, Google’s construction reverts back to the original words of the term and simply recites that “zones are grouped according to a common theme by

configuring the *zones* in a particular *scene* (e.g., morning, afternoon, or garden).” Articulating that zones are configured “in a particular scene” is not helpful because it does not provide any clarity to the new term “common theme” or offer any other explanation as to what a “scene” is. Google’s “e.g.,” suffix is of no help either, as “morning,” “afternoon,” and “garden” are simply names of times and a place; the jury would be left to guess as to how they would apply, if at all. Indeed, the use of “e.g.,” itself implies that these names are merely examples and may not be limiting as to the meaning of “scene” or “theme.”

Third, Google’s constructions of “zone” and “zone scene” read a limitation into “zone scene” that is not present in the plain language of the claims or even articulated by the specification. Condensing Google’s constructions of “zone” and “zone scene” down to a basic level, Google appears to advance that a “zone” is an “area or areas” (with additional qualifications) and a “zone scene” is “a group of two or more zones” (with additional qualifications). Putting these together, Google appears to advance that a “zone scene” is a group of two or more areas. But the limitation of grouping two (or more) *areas* is not present in the plain language of the claims. The claims simply recite that each “zone scene” is “identifying a group configuration associated with “two or more . . . playback devices.”” Moreover, the Zone Scene Patents do not refer to “groups” or groupings of “areas” – they consistently refer to “groups” or “groupings” of *playback devices* (or zone players). *E.g.*, ‘206 Pat. at 2:12-13 (“audio *players* may be readily grouped”); 2:28-29 (“the present invention pertains to controlling a plurality of multimedia *players*, or simply *players*, in groups”); 5:4-5 (“[t]wo or more zone *players* may be grouped together to form a new zone group”); 7:16-19 (“[i]n one embodiment, an application module is configured to facilitate grouping a number of selected zone *players* into a zone group and synchronizing the zone *players* for one audio source”). In this way, Google’s dual constructions inject into the definition of “zone scene”

a backdoor requirement that two “areas” be grouped together.

In sum, Google’s construction is not helpful to a jury. It creates more questions than answers. And it attempts to read a limitation requiring “areas” to be grouped into the term “zone scene.” Sonos’s construction, on the other hand, is grounded in the plain language of the claim and the usage in the specification.

VIII. “Group Configuration” [Proposed by Google]

The ‘206 Patent claims recite “group configuration” as part of the definitional phrase defining “zone scene,” namely “each zone scene identifying a group configuration associated with two or more of the plurality of independent playback devices.” ‘206 Pat. at Cl. 1. Sonos proposes that no separate construction of “group configuration” is necessary as the meaning of this term is clear from Sonos’s construction of the phrase in which it is used. Indeed, as the discussion above makes clear, a “zone scene identifying a group configuration associated with two or more of the plurality of independent playback devices” means a “a previously-saved grouping of zone players that are to be configured for synchronous playback of media when the zone scene is invoked.” This construction accounts for the claim’s usage of “group configuration” and properly explains the meaning of “group configuration” in the context of “zone scene.”

Google does not offer a construction for this term but instead contends it is indefinite, arguing in a single sentence that “the term ‘group configuration’ is not distinguishable from ‘zone scene’ or ‘zone configuration’ as described in the specification or under Sonos’s theories.” Ex. 10. As explained above with respect to Sonos’s construction of both “zone configuration” and “zone scene,” Google is wrong. Sonos’s construction of “zone configuration” clearly sets forth that a “zone configuration” means “configuration data that provides an indication of a zone scene.” In other words, the “zone configuration” comprises a data representation of the “zone scene.” And Sonos’s construction of a “zone scene identifying a group configuration . . . ” clearly sets forth that

this means a “previously-saved grouping of . . . playback devices . . .” Given these constructions, a POSITA would have no trouble comprehending these terms and the distinction between them.

Moreover, Google confusingly contends that the term “group configuration” is indefinite despite offering its own construction for the term “zone scene,” which, as explained, is expressly defined in the claim with reference to “group configuration.” Google fails to reconcile these conflicting positions. For at least these reasons, the Court reject Google’s indefiniteness theory.

IX. “Invoke” [Proposed by Google]

The ’206 Patent’s claims recite that “the displayed selectable indication is selectable to cause one or more of the zone scenes to be *invoked*,” and the ’966 and ’885 Patents’ claims recite that “zone players” in “a predefined grouping” are “configured for synchronous playback of media when [a] zone scene is *invoked*[.]” The term “invoke” in these claim limitations is easily understandable and thus, no construction is necessary. *See Phillips* at 415 F.3d at 1314.

Google does not dispute that this term is easily understandable. Instead, Google attempts to artificially limit the term “invoke” to the function of “applying a parameter or setting,” without specifying what the parameter or setting is or is applied to. Google’s construction is also not consistent with either the plain and ordinary meaning of “invoke” or the intrinsic evidence.

For instance, the Zone Scene Patents consistently use the term “invoke” synonymously with the term “activate,” which is an operation that is not limited to “applying a parameter or setting.” Nor does any of the intrinsic evidence suggest that “invoke” must be limited to the function of “applying a parameter or setting.” *See, e.g.*, ’206 Patent at 2:33-34 (“When the scene is *activated*, the players in the scene react in a synchronized manner.”), 2:38-43 (“[T]he scene may be *activated* at any time or a specific time.”), 3:2-4 (“The players in a scene are synchronized to play a multimedia file when the scene is *activated*.”), 9:57-64, 10:21-33.

The extrinsic evidence also confirms that Google’s proposal is improperly limiting. *E.g.*,

Ex. 11 at 3 (Google's Disclosure of Extrinsic Evidence citing dictionaries defining "invoke" as "[t]o **activate** a program, routine, function or process," and defining "invocation" as "[t]he **activation** of a program or procedure"); Ex. 12 at SONOS-SVG2-18483 ("Invoke" means "[t]o **call or activate**, used in reference to commands and subroutines."); Ex. 13 at SONOS-SVG2-18794 ("To *invoke* something is to **call on it and bring it to bear** on the situation at hand ...").

X. "Causing the Selectable Indication ... to Be Displayed" [Proposed by Google]

Google alleges that the phrase "causing the selectable indication . . . to be displayed" of claim 19 of the '206 Patent is indefinite. This argument appears to be based entirely on the fact that claim 19 includes a clerical error in its dependency clause (which erroneously identifies claim 17 instead of claim 18). However, this is an obvious scrivener's error that is correctable by the Court, and thus is not a proper ground for indefiniteness. *See, e.g., Hoffer v. Microsoft Corp.*, 405 F.3d 1326, 1331 (Fed. Cir. 2005) (concluding claim with error in dependency apparent on face of patent was improperly invalidated and correctable by court).

When comparing the language of dependent claim 19 to dependent claim 18, there is no reasonable debate that claim 19 was meant to depend from claim 18:

18. The computer-readable medium of claim 17, wherein causing the selectable indication of the received zone configuration to be displayed comprises causing an indication **of at least one of the one or more zone scenes to be displayed**.

19. The computer readable medium of claim 17, wherein causing the selectable indication **of the at least one of the one or more zone scenes to be displayed** comprises displaying an indication of the group configuration identified by the at least one of the one or more zone scenes to be displayed.

This is also confirmed by dependent claim 14, which mirrors the language of claim 19 but depends from claim 13 (which mirrors the language of dependent claim 18), as opposed to claim 12 (which mirrors the language of independent claim 17). *Castlemorton Wireless, LLC v. Bose Corp.*, Case No. 20-cv-29, 2020 WL 6578418, at *3 (W.D. Tex. July 22, 2020) (comparing claim

with error to other claim with similar language).

Nothing in the prosecution history suggests a different interpretation. To the contrary, the dependency error was present when the original application was filed, which “further indicates that it is an unintended error not subject to reasonable debate.” *Traxxas, L.P. v. Hobbico, Inc.*, Case No. 16-cv-768, 2017 WL 4347709, at *22 (E.D. Tex. Sept. 29, 2017).

Thus, the obvious error in claim 19’s dependency clause should be corrected to depend on claim 18, which moots Google’s indefiniteness argument for this term.

XI. “Local Area Network” [Proposed by Sonos]

As explained, a core aspect of Sonos’s networked audio system is that it operates on a “data network,” such as a “local area network” (LAN). Consequently, the term “local area network” is found in many of Sonos’s patents, including the independent claims of the ’615 Patent.

In the field of networking, a “local area network” is a well-understood term of art that refers to a ***data*** network that interconnects devices within a ***limited*** area. The ’615 Patent uses the term “local area network” consistent with this widely-accepted meaning. Ex. 24 at ¶¶ 50-84, 90-98.¹⁵

For instance, the lead embodiment illustrated in Figure 1 of the ’615 Patent shows “***data network*** 128” interconnecting devices within a ***single*** home, which a POSITA would understand amounts to a “local area network.” *Id.* at ¶¶ 33, 93. The ’615 Patent also discloses an “Ad-hoc network 610,” which a POSITA would understand is one specific example of a “data network,” and expressly describes an “Ad-hoc network” as a “***local area*** network or other ***small*** network” *Id.* at ¶¶ 34, 65; ’615 Patent at 10:64-66. What’s more, the ’615 Patent repeatedly uses the term “local” to contrast with other terms connoting large areas or wide coverage, such as “wide area network,” “Internet,” and “cloud.” Ex. 24 at ¶ 95.

¹⁵ A copy of Dr. Schmidt’s declaration is attached as Exhibit 24.

As set forth in Dr. Schmidt’s Declaration, various technical literature and dictionaries also confirm that a POSITA would have understood a “local area network” to be a *data* network that interconnects devices in a *limited* area. *Id.* at ¶¶ 50-59, 96.¹⁶

Thus, in view of the foregoing, Sonos’s proposed construction of “local area network” is a “data network that interconnects devices within a limited area, such as a home or office,” which faithfully captures how a POSITA would understand the plain and ordinary meaning of this term when viewed in light of the ’615 Patent.

Notably, Google agrees with Sonos that “local area network” should be assigned its plain and ordinary meaning. However, Google has so far refused to adopt Sonos’s construction, without providing any explanation as why Google disagrees with Sonos’s articulation of the plain and ordinary meaning. To the extent Google contends that a “local area network” is something other than a “data network that interconnects devices within a limited area, such as a home or office,” that interpretation is contrary to the plain and ordinary meaning and the intrinsic evidence.

XII. “Cloud” [Proposed by Google]

Some of the claims of the Direct Control Patents recite one or more “cloud servers” that can interact with control and/or playback devices to facilitate transferring playback from a control device to a playback device. ’615 Patent at Cls. 1, 13, 25. The other claims of the Direct Control Patents recite “a cloud-based computing system associated with a cloud-based media service” that provides a “remote playback queue.” ’033 Patent at Cls. 1, 12, 15. There is no need for the Court to construe the term “cloud” that appears in these limitations because that is a word that lay jurors already understand. *See Phillips*, 415 F.3d at 1314. Google is nevertheless asking the Court to broadly construe “cloud” to mean “over a network.” Not only is this construction unnecessary,

¹⁶ E.g., Ex. 14 at SONOS-SVG2-18676 (“A *local area network* is a high-speed *data network* that covers a relatively *small geographic area*.”).

but it is also contrary to the plain and ordinary meaning of the word “cloud,” which is not merely a generic term that encompasses *any* type of network. Under Google’s construction, the word “cloud” would cover a *local* area network, such as a user’s home Wi-Fi, which is contrary to both the well-understood plain and ordinary meaning of the term “cloud” and the intrinsic evidence.

The ’615 Patent’s teachings are clear that the term “cloud” refers to computing systems that are not part of any “local” network of a user, but rather are remote from a user’s “local” network and are accessed by the user’s devices via a wide-area network such as the Internet. *See, e.g.*, ’615 Patent 11:62-12:3 (“[E]ach zone player . . . may access the Internet when retrieving media from *the cloud (e.g., Internet)* via the bridging device.”), 16:1-4, FIG. 7. In fact, the term “cloud” is repeatedly and consistently contrasted with the term “local.” *See, e.g., id.* at 14:42-43 (“[M]usic is streamed from the *cloud* to one or more playback devices on the *local* playback network.”), 16:1-4 (“A connection between the third-party application and the *local* playback device (e.g., Sonos ZonePlayerTM) can be direct over a *local* area network (LAN), *remote* through a proxy server *in the cloud*, and so on.”), 12:19-43, 17:12-20.

Extrinsic evidence, moreover, confirms that the term “cloud” does not simply mean “over a network.” For example, Google’s own definition of “cloud computing” is “the practice of using a network of *remote* servers *hosted on the internet* to store, manage, and process data, *rather than a local server or personal computer*.” Ex. 15. As another example, the *American Heritage Dictionary* defines “cloud” as “[a] *large area* of coordinated wireless *Internet* service” and “[t]he collection of data and services available through the *Internet*[.]” Ex. 16 at SONOS-SVG2-18274.

XIII. “A Media Particular Playback System” [Proposed by Sonos]

Dependent claims 3, 15, and 26 of the ’615 Patent each contain the phrase “a media *particular* playback system,” which undeniably includes a typographical error that is evident from the face of the patent and therefore correctable by this Court. *See, e.g., Ultimax Cement Mfg Corp*

v. *CTS Cement Mfg Corp*, 587 F.3d 1339, 1352 (Fed. Cir. 2009). By simply reading the claim language, a POSITA would readily understand that the inclusion of the word “particular” in this phrase was a typographical error. Ex. 24 at ¶¶ 100-102.

The conclusion that the phrase “a media **particular** playback system” in dependent claims 3, 15, and 26 includes a typographical error is further supported by dependent claims 2 and 14, which include a similar structure to dependent claims 3 and 15 but use the correct phrase “a media playback system” rather than the erroneous phrase “a media **particular** playback system.” *Id.* at ¶¶ 103-105; *Castlemorton*, 2020 WL 6578418, at *3 (comparing claim with error to other claim with similar language). Given the parallelisms between dependent claims 2 and 14 and dependent claims 3 and 15, a POSITA would understand that the inclusion of “particular” in the phrase “a media particular playback system” is a correctable typographical error. Ex. 24 at ¶ 106.

Based on the foregoing, Sonos is proposing a construction of the phrase “a media particular playback system” that corrects the typographical error by removing the word “particular.” This construction is not subject to reasonable debate by a POSITA when considering the claim language as a whole and the ’615 Patent’s specification. *Id.* at ¶¶ 107-109; *see also, e.g.*, ’615 Patent at 2:51-57, 2:60-3:1, 12:44-67 (describing the inventions of the ’615 Patent using terms such as “multimedia playback devices” and never using the phrase “media particular”). Moreover, there is nothing in the prosecution history suggesting to a POSITA that any other reasonable correction should apply. Ex. 24 at ¶¶ 110-12; Ex. 23 (showing that the erroneous inclusion of “particular” in the phrase “a media particular playback system” was introduced during prosecution when Sonos amended the independent claims to recite a “**particular** playback device” by propagating the word “particular” in front of “**playback** device” in various dependent claims, but also erroneously inserting the word “particular” in front of “**playback** system” in dependent claims 3, 15, and 26).

For at least these reasons, the Court should adopt Sonos's construction.

XIV. “Data Network” [Proposed by Sonos]

Sonos's original system was fundamentally different from conventional audio systems of the time, which involved running speaker wires from passive speakers back to a centralized receiver, because Sonos's system operated on a “data network.” This core attribute of Sonos's system is often expressly claimed in Sonos's patents, including the '966, '033, and '885 Patents asserted here, which recite a “data network.”

In the field of networking, the term “data network” is a well-understood term of art that is often used interchangeably with other well-understood terms such as “computer network,” “packet network,” and “data communications network” to refer to a specific class of networks that interconnect and enable devices to exchange information with one another in the form of digital data packets. Ex. 25 at ¶ 45¹⁷; Ex. 24 at ¶¶ 40-62. In this respect, it is well understood that a “data network” has several defining characteristics that distinguish it from other types of communication mediums that are not included in this class of networks. First, a “data network” enables networked devices to engage in *two-way* communication with one another, which distinguishes it from a medium that only allows for one-way communication. *Id.* at ¶¶ 41, 67-73; Ex. 25 at ¶¶ 46, 56. Second, a “data network” transfers information between networked devices in the form of *digital data packets* (sometimes more generally referred to as “computer data”), which distinguishes it from a medium that transfers other forms of information. *Id.* at ¶¶ 47, 56; Ex. 24 at ¶¶ 41, 78-83. The '966, '033, and '885 Patents use the term “data network” consistent with this plain and ordinary meaning.

As an initial matter, the specifications of the '966, '033, and '885 Patents repeatedly and

¹⁷ A copy of Dr. Almeroth's declaration is attached as Exhibit 25.

consistently describe the disclosed “data network” as a medium that enables networked devices to engage in *two-way* communication. *Id.* at ¶¶ 63-66; Ex. 25 at ¶¶ 59-60, 62. For instance, the disclosure¹⁸ of the ’966 and ’885 Patents explains that “data network 108” enables each connected “zone player” to “send data back and forth,” such as for “sharing” audio over “data network 108.” ’966 Pat. at 5:26-30 (“The network interface 202 [of a zone player 200] *facilitates a data flow* between a data network (i.e., ***the data network 108*** of FIG. 1) and the zone player 200 and typically executes a special set of rules (i.e., a protocol) *to send data back and forth.*”), 5:4-15 (“[T]he audio source may be *shared among the devices on the network 108.*”); *see also, e.g., id.* at 5:30-39, 5:62-64, 6:1-4.

Along similar lines, the ’033 Patent explains that “data network 128” enables each connected “zone player” to transmit and receive data so that, for instance, audio sources can be “shared.” *See, e.g., ’033 Pat. at 7:44-51:*

[T]he network interface 402 [of a zone player 400] facilitates *a data flow between zone players and other devices on a data network* (e.g., ***the data network 128*** of FIG. 1) and the zone player 400. In some embodiments, the network interface 402 can manage the assembling of an audio source or file into smaller *packets that are to be transmitted over the data network* or reassembles *received packets* into the original source or file.

Id. at 7:15-18 (“*Audio content received* from one or more sources *can be shared* amongst the zone players 102 to 124 *via the data network 128* and/or the controller 130.”); *see also, e.g., id.* at 4:21-33, 4:48-60, 7:4-11, 7:60-8:6. The ’033 Patent provides similar disclosures regarding “Ad-hoc network 610,” which a POSITA would understand is one specific example of a “data network.” *Id.* at 11:2-12; Ex. 24 at ¶¶ 34, 65.

Moreover, the specifications of the ’966, ’033, and ’885 Patents repeatedly and consistently

¹⁸ The ’966 and ’885 Patents have nearly identical specifications. Thus, the cited teachings from the ’966 Patent can also be found in the ’885 Patent.

describe that the disclosed “data network” carries information in the form of digital data packets. *Id.* at ¶¶ 74-77; Ex. 25 at ¶¶ 61, 63-65. For instance, the ’966 and ’885 Patents explain that audio shared over the “data network 108” is in a “digital format,” and that communications over the “data network 108” involve digital “packets” and adherence to networking protocols and standards that a POSITA would have understood involve the exchange of digital data packets (e.g., Ethernet, TCP/IP, and IEEE 802.11). *Id.* at ¶¶ 64-65; *see also*, e.g., ’966 Pat. at 4:49-57 (“[A]udio sources are in ***digital format*** and can be ***transported*** or streamed over ***a data network.***”), 4:62-66, 5:4-15 (“The analog audio sources can be converted to ***digital*** audio sources. . . . the audio source may be ***shared*** among the devices ***on the network 108.***”), 5:30-48:

One of the common protocols used in the Internet is ***TCP/IP (Transmission Control Protocol/Internet Protocol)***. In general, a network interface manages the assembling of an audio source or file into smaller ***packets*** that are ***transmitted over the data network*** or reassembles ***received packets*** into the original source or file. . . . The wireless interface 216 . . . provides network interface functions by a wireless means for the zone player 200 to communicate with other devices in accordance with a communication protocol (such as the wireless standard ***IEEE 802.11a, 802.11b or 802.11g***). The wired interface 217 provides network interface functions by a wired means (e.g., an ***Ethernet*** cable).

Similarly, the ’033 Patent expressly explains that communications over the “data network 128” involve digital “packets” and adherence to networking protocols and standards that a POSITA would have understood involve the exchange of digital data packets. Ex. 24 at ¶¶ 76-77; ’033 Pat. at 7:44-57 (discussing “data flow” on the “data network” involving transmitting and receiving “packets” that can include “Internet Protocol (IP)-based” source and destination addresses), 7:60-8:6, 11:46-52.

Importantly, the disclosures of the Asserted Patents also ***never*** contemplate that a “data network” could take some other form that does not have these defining characteristics.

As explained by Drs. Schmidt and Almeroth, various technical literature and dictionaries

likewise confirm that the term “data network” refers to a specific class of networks that have the defining characteristics of enabling two-way communication and exchanging information in the form of digital data packets. Ex. 25 at ¶¶ 67-78; Ex. 24 at ¶¶ 68-71, 79-83.¹⁹

In view of the foregoing, Sonos’s proposed construction of “data network” is “a medium that interconnects devices, enabling them to send digital data packets to and receive digital data packets from each other.” This faithfully captures how a POSITA would understand the plain and ordinary meaning of this term when viewed in light of the Asserted Patents.

Notably, Google agrees with Sonos that “data network” should be assigned its plain and ordinary meaning. However, Google has so far refused to adopt Sonos’s construction, without providing any explanation as to why Google disagrees with Sonos’s articulation of the plain and ordinary meaning. To the extent Google contends that a “data network” is something other than a “a medium that interconnects devices, enabling them to send digital data packets to and receive digital data packets from each other,” that interpretation is contrary to the plain and ordinary meaning and the intrinsic evidence.

XV. “Remote Playback Queue” [Proposed by Google]

The ’033 Patent recites a “remote playback queue,” which is an easily understandable term that should be accorded to its plain and ordinary meaning. *See Phillips*, 415 F.3d at 1314.

¹⁹E.g., Ex. 17 at SONOS-SVG2-18759 (explaining a “LAN” is an example of a “data network[]” and that “each device attaches to the LAN” via a “network interface card” that “contains the logic for accessing the LAN and for **sending and receiving** blocks of data on the LAN.”); Ex. 18 at SONOS-SVG2-18305, 312 (explaining “[e]ach LAN consists of a single shared **medium**” and “**computers** take turns using the **medium** to send [‘**packets’/‘data’]” and “**LAN technologies require computers to divide data into small packets called frames**”); Ex. 14 at SONOS-SVG2-18676 (“A local area network is a high-speed **data network** . . . LAN is a type of broadband **packet** access **network** that carries the **packet data** traffic of an organization. . . . The physical layer [of the LAN protocols] is primarily concerned with the **transmission medium** and its physical characteristics for **digital signal transmission**.”).**

Google does not dispute that this term is easily understandable, as confirmed by the fact that Google’s construction actually repeats the claim term “remote playback queue” in full. Instead, in order to manufacture a non-infringement position, Google seeks artificially to narrow this term by improperly tacking on an entirely new claim limitation that the “remote playback queue” must be “provided by a third party application.” Google’s proposal should be rejected.²⁰

Google’s proposed construction is contrary to the plain language of the claims. Neither the words used in the “remote playback queue” term nor the rest of the language in claims 1, 12, and 15 limits the “remote playback queue” in the manner proposed by Google, which would require it to be provided by an “application” of a “third party.” Instead, the claims expressly require that the “remote playback queue” be “provided by a *cloud-based computing system* associated with a *cloud-based media service*.” And, like the term “remote playback queue” itself, this “cloud-based” claim language does not require the provider of the “remote playback queue” to be an “application” of a “third party.” In short, the claim language confirms that the “remote playback queue” is provided by a “cloud-based computing system” rather than “a third party application,” as Google’s construction would require.²¹

Additionally, nothing in the intrinsic evidence of the ’033 Patent that justifies departing from the plain and ordinary meaning of “remote playback queue” and limiting the term such that

²⁰ *Nichia Corp. v. Everlight Elecs. Co., Ltd., et al.*, Case No. 13-cv-702, 58-60 (E.D. Tex. Dec. 12, 2014) (rejecting proposed constructions that restated claim terms and then tacked on an additional limitation, stating that “Plaintiff does not contend that the disputed terms require construction, but instead seeks to import a limitation from the specification into the claims”).

²¹ *Imageware Systems, Inc. v. M2SYS Tech., LLC*, Case No. 13-cv-846, 2014 WL 12488497 at *10 (S.D. Cal. July 24, 2014) (rejecting proposed construction of “application” to mean “third-party software development kit” where “patent claims do not reference third-party origin of the SDKs” and “specification does not state that SDKs *must* originate with a third party”) (emphasis in original); *Howlink Global LLC v. Centris Info. Sys., LLC et al.*, Case No. 11-cv-71, 2012 WL 3779025 at *17-19 (E.D. Tex. June 28, 2012) (rejecting construction that sought to introduce third parties into the claim).

it must be “provided by a third party application,” as requested by Google.²²

Further, Google’s proposal should also be rejected because it introduces ambiguity into the claims. For example, Google’s proposal introduces the concept of a “third party,” but neither Google’s proposal nor the rest of the claim language even recites a “first party.” Thus, it is unclear what “party” Google is attempting to contrast with its proposed “third party” limitation.²³

XVI. “An Instruction … to Take Over Responsibility for Playback” [Proposed by Google]

The claims of the ’033 Patent require “an instruction for the at least one given playback device to take over responsibility for playback” This language is easily understandable and should be accorded its plain and ordinary meaning. *See Phillips*, 415 F.3d at 1314.

Google does not dispute that the word “instruction” (or the other claim language referring to the “instruction”) should be given its plain and ordinary meaning. However, Google asks the Court to find that the claim term “an instruction” is limited to *one single* instruction. Google’s proposal should be rejected because it is inconsistent with the well-established rule that an indefinite article “a” or “an” in patent parlance means “one or more.”

As explained by the Federal Circuit in *Baldwin*:

That “a” or “an” can mean “one or more” is best described as a rule, rather than merely as a presumption or even a convention. The exceptions to this rule are extremely limited: a patentee must evince a clear intent to limit “a” or “an” to “one.” The subsequent use of definite articles “the” or “said” in a claim to refer back to the same claim term does not change the general plural rule, but simply reinvokes that non-singular meaning. An exception to the general rule that “a” or “an” means more than one only arises where the language of the claims themselves, the specification, or the prosecution

²² See, e.g., *KIS, S.A. v. Foto Fantasy, Inc.*, 60 F. App’x 319, 321 (Fed. Cir. 2003) (“[I]f the claim language is clear on its face, then a court’s consideration of the rest of the intrinsic evidence is restricted to determining if a deviation from the clear language of the claims is specified.”) (internal quotation marks omitted).

²³ *Brazabra Corp. v. Ce Soir Lingerie Co., Inc.*, Case No. 18-cv-683, Dkt. 35 (W.D. Tex. Aug. 15, 2019) (rejecting proposed construction that was “more likely to introduce, rather than clarify, ambiguity in the claim term”); *Finalrod IP, LLC et al. v. John Crane, Inc. et al.*, Case No. 15-cv-097, Dkt. 215, p. 30 (W.D. Tex. Feb. 11, 2019) (same).

history necessitate a departure from the rule.

Baldwin Graphic Systems, Inc. v. Siebert, Inc., 512 F.3d 1338, 1342-43 (Fed. Cir. 2008) (internal quotation marks omitted). Applying this rule, courts have consistently found that claim terms beginning with the article “a” or “an” mean “one or more.”²⁴

The same conclusion applies to the claim term “an instruction” here, which should be construed to cover one or more instructions.²⁵ Thus, Sonos respectfully requests that the Court reject Google’s attempt to improperly limit the claimed “an instruction” to a single instruction.

XVII. “Wherein the Instruction Comprises an Instruction” [Proposed by Google]

Independent claims 1 and 12 of the ’033 Patent each recites “transmitting an instruction for the at least one given playback device to take over responsibility for playback of the remote playback queue from the computing device[.]” In turn, dependent claims 2 and 13 each recites:

wherein the instruction comprises an instruction for the cloud-based computing system associated with the cloud-based media service to provide the data identifying the next one or more media items to the given playback device for use in obtaining the at least one media item from the cloud-based computing system associated with the cloud-based media service.

Google contends that the “wherein the instruction comprises an instruction” phrase in these dependent claims is indefinite. This litigation-inspired position is nonsense.

In reality, repeating a claim element after the transitional word “comprises” and then elaborating on that claimed element is a common claim-drafting technique; one that Google itself

²⁴ *Convolve, Inc. v. Compaq Computer Corp.*, 812 F.3d 1313, 1321 (Fed. Cir. 2016) (finding that “a processor” means “one or more processors”); *Rehco LLC v. Spin Master, Ltd.*, 759 F. App’x 944 (Fed. Cir. 2019) (construing “a signal” to mean “one or more signals”); *Implicit, LLC v. NetScout Systems, Inc.*, 2019 WL 1614725, *11-13 (E.D. Tex. Apr. 15, 2019) (finding that “a received packet of a message” includes “one or more received message packets”).

²⁵ The only exception to this general rule is in those “rare circumstances” where a patentee “evinces a clear intent” to “limit ‘a’ or ‘an’ to only ‘one.’” See, e.g., *Baldwin*, 512 F.3d at 1342-43; *KCJ Corp. v. Kinetic Concepts, Inc.*, 223 F.3d 1351, 1356 (Fed. Cir. 2000). However, there was no such “clear intent” by Sonos here to limit the claim term “an instruction” to only ***one single*** instruction.

uses in many of its own patent filings.²⁶ Indeed, the MPEP explains that the transitional term “comprising” is synonymous with “characterized by.” MPEP, 9th ed., rev. 10.2019 § 2111.03 (2020). This is exactly how the “wherein the instruction comprises an instruction” phrase is used in the ’033 Patent; it sets forth additional, required characteristics of the transmitted “instruction” recited in the independent claims.

What’s more, as discussed above, “an instruction” means “one or more instructions.” Thus, Google’s feigned confusion over how “an instruction” could comprise a specific “instruction for the cloud-based computing system” is legally dubious. *See Baldwin Graphic Systems, Inc.*, 512 F.3d at 1342.

For at least these reasons, Google’s indefiniteness argument should be rejected.

²⁶ See, e.g., Ex. 19 at claim 6 (“wherein **the index comprises an index** of articles associated with a global computer network”); Ex. 20 at claim 19 (“wherein **the indication comprises an indication** that the physical attachment mechanism is no longer physically intact”); Ex. 21 at claim 17 (“wherein **the command comprises a command** to enable radar communication”); Ex. 22 at claim 7 (“wherein **the request comprises a request** to add one or more of the identified search queries to the set of keywords.”).

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Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned certifies that on April 27, 2021, all counsel of record who are deemed to have consented to electronic service are being served with a copy of this document through the Court's CM/ECF system.

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